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APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. FILING DATE 09/787,327 04/20/01 BROWN Ν PU3514USW **EXAMINER** 023347 HM22/0731 DAVID J LEVY, VP INTELLECTUAL PROPERTY JIANG, S GLAXO WELLCOME INC PAPER NUMBER ART UNIT GLOBAL INTELLECTUAL PROPERTY FIVE MOORE DR, PO BOX 13398 1617 RESEARCH TRIANGLE PARK NC 27709-3398 DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

07/31/01

| | | Application | n No. | Ar | oplicant(s) | |
|---|--|-----------------|------------|------------------|-------------|--|
| | | | 09/787,327 | | ROWN ET AL. | |
| Office | ice Action Summary | Examin r | <u> </u> | | t Unit | |
| | | Shaojia A. | Jiana | İ | 17 | |
| The MAILING DATE of this communication appears on the c ver sheet with the correspondence address | | | | | | |
| Peri df r Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status 1) ☐ Responsi | ve to communication(s) filed o | .n | | | | |
| · | | | | | | |
| · — | Since this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disp sition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-10,12-15 and 22</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-10,12-15 and 22</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)⊠ The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| ·- | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| · — : — | • | imanta haya baa | rossivad | | | |
| | ified copies of the priority docu | | | a Application' l | Ma | |
| 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | | |

DETAILED ACTION

This application is a 371 of PCT/EP99/06886.

This application claims the foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the instant application.

Objection to the Specification

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

The attempt to incorporate subject matter into the instant application by reference to other than US Patents is improper. Currently, the specification is objected to because the essential subject matters are incorporated herein by reference to other than US patents. See the specification herein page 10 line 32 to page 11 line 5.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1617

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10 and 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 10 recites the broad recitation "a mammal" and the claim also recites "including a human" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1617

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 12-15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korba (PTO-1449, submitted with the application) and Glazier et al. (5,627,165, PTO-892).

Korba teaches lamivudine is useful in methods of treatment of HBV infections.

Korba also teaches that lamivudine in combination with other antiviral agents is useful in a pharmaceutical composition or formulation and methods of treatment of HBV infections. See abstract, the right column of page 49.

Glazier et al. teaches that adefovir (PMEA) or adefovir dipivoxil

(Bis(pivaloyloxymethyl)PMEA, a prodrug of PMEA) is known to be useful in a pharmaceutical composition or formulation and methods of treatment of HBV infections.

See col.1 lines 66-67, col.34 lines 39-40, col.37 lines 5-19, col.38 Tables.

The prior art does not expressly disclose that the employment of lamivudine in combination with adefovir or adefovir dipivoxil is useful in a pharmaceutical composition or formulation and methods of treatment of HBV infections. The prior art does also not expressly disclose the manner of administration of the pharmaceutical composition or formulation herein and the effective amounts of active agents in the composition herein to be administered.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ lamivudine in combination with adefovir or adefovir

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dipivoxil is useful in a pharmaceutical composition or formulation and methods of treatment of HBV infections, and to determine the manner of administration of the pharmaceutical composition or formulation herein and to optimize the effective amounts of active agents in the composition herein to be administered.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ lamivudine in combination with adefovir or adefovir dipivoxil is useful in a pharmaceutical composition or formulation and methods of treatment of HBV infections since both lamivudine and adefovir or adefovir dipivoxil are known to be useful in a pharmaceutical composition or formulation and in methods of treatment HBV infections based on the prior art. Moreover, a combination of lamivudine and other antiviral agents is known to be useful in the treatment of HBV according to Korba. Therefore, one of ordinary skill in the art would have reasonably expected that combining lamivudine and adefovir or adefovir dipivoxil known useful for the same purpose in a composition to be administered would improve the therapeutic effect for treating HBV infections. Additionally, one of ordinary skill in the art would have been motivated to determine the manner of administration of the composition herein and to optimize the effective amounts of active ingredients in the composition because the determination of the manner of administration and the optimization of amounts of active agents to be administered is considered well within the skill of artisan.

Since all composition components herein are known, it is considered prima facie obvious to combine them into a single composition useful for the very same purpose. At

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least additive therapeutic effects would have been reasonably expected. See *In re Kerkhoven*, 205 USPQ 1069 (CCPA 1980).

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Thus the claimed invention as a whole is clearly prima facie obvious over the combined teachings of the prior art.

In view of the rejections to the pending claims set forth above, no claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jiang, whose telephone number is (703) 305-.

1008. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minna Moezie, J.D., can be reached on (703) 308-4612. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-1235.

Shaojia A. Jiang, Ph.D. Patent Examiner, AU 1617 July 23, 2001

MINNA MOEZIE, J.D.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600